



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,922	06/13/2006	Athanasios Athanasiou	2003P01911WOUS	9213
46726 7590 05/06/2009 BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562				
EXAMINER NGHIEM, MICHAEL P				
ART UNIT 2863		PAPER NUMBER		
MAIL DATE 05/06/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,922

Applicant(s)

ATHANASIOU, ATHANASIOS

Examiner

MICHAEL P. NGHIEM

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The Amendment filed on February 10, 2009 has been considered.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the memory connected to the sensor (claims 10, 20) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 21 is objected to because of the following informalities: "the parameter values" (line 11) and "the remote service device" (line 12) lack antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishio et al. (US 6,553,774).

Regarding claim 10, Ishio et al. discloses a household appliance (refrigerator, Abstract, line 1) having at least one sensor (detector, Abstract, line 4) for detecting at least one operating parameter of the household appliance (Abstract, lines 4-6), a memory

(Abstract, line 7) connected permanently to the sensor for periodically recording the value of the operating parameter detected by the sensor (memory stores conditions detected by detector, Abstract, lines 4-8) and an interface (interface between memory and diagnostic device, Abstract, line 8) for reading out the content of the memory (Abstract, lines 8-10).

Regarding claim 14, Ishio et al. discloses the household appliance includes a housing (housing of refrigerator, Abstract, line 1) and the memory is built in the housing (memory is part of self-diagnosis apparatus of refrigerator, housing of refrigerator, Abstract, lines 1-8).

Regarding claim 15, Ishio et al. discloses the household appliance includes at least one of a refrigerating device (Abstract, line 1).

Regarding claim 16, Ishio et al. discloses a method for determining a cause of failure on a household appliance (Abstract; column 2, lines 1-12), the method comprising the following acts:

periodically detecting at least one operating parameter of the household appliance and recording the detected value in a memory at least during normal operation of the household appliance (Abstract, lines 4-8);

reading out the memory in the case of a fault (Abstract, lines 8-10);

tracing the cause of the fault from the parameter values which have been read out (performing diagnosis, column 2, lines 1-12; it is inherent that a cause of fault is found since an improvement action is selected by the diagnostic means, column 2, lines 6-7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishio et al. in view of Severn (GB 2 152 673).

Ishio et al. discloses all the claimed limitations as discussed above except:

- regarding claims 11 and 12, the first interface includes an interface to a data network, especially to a telephone network.
- regarding claim 13, the first interface includes a cordless interface.

Nevertheless, Severn discloses the first interface includes an interface to a data network, especially to a telephone network (page 4, lines 102-105), the first interface

includes a cordless interface (mobile version of serial communication interface, page 4, lines 119-121). This would increase the range of communication for alarm reporting (page 4, lines 105-107).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Ishio et al. with telephone interface or cordless interface as disclosed by Severn for the purpose of increasing the communication range for reporting alarms.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishio et al..

Ishio et al. discloses all the claimed limitations as discussed above except the recorded parameter values are depleted or overwritten after a first predetermined storage time and deleted after a second predetermined storage time.

Nevertheless, Ishio et al. discloses that the conditions parameters are stored in memory for a predetermined time (Abstract, lines 6-7). Thus, it is obvious that the conditions parameters would either be depleted, overwritten, or deleted after a predetermined time.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to deplete, overwrite, or delete parameter values after predetermined storage times for the purpose of reusing existing memory spaces. Thus, memory can be efficiently used and saved.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishio et al. in view of Finnegan et al. (US 4,482,785).

Ishio et al. discloses all the claimed limitations as discussed above except transferring the recorded parameter values from the household appliance to a separate device and performing the act of tracing the cause of the fault at the separate device.

Nevertheless, Finnegan et al. discloses transferring the recorded parameter values from the household appliance to a separate device (remote control and monitor unit 12, Fig. 1d) and performing the act of tracing the cause of the fault at the separate device (column 7, lines 52-56).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Ishio et al. with a separate device for the purpose of performing the diagnosis. Having a remote, separate, and central processing system would increase the capability to process data since data can be collected from a wider range of areas.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishio et al. in view of Yoshida et al. (US 6,438,973).

Ishio et al. discloses all the claimed limitations as discussed above except a remote service device in selective operative communication with the interface for use by a service designate for diagnosing problems with the appliance.

Nevertheless, Yoshida et al. discloses a remote service device (device the stored data is downloaded to, Abstract, lines 5-7) in selective operative communication with the interface for use by a service designate (downloaded by service technician, Abstract, lines 5-7) for the purpose of diagnosing problems with the appliance (column 2, lines 46-49).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Ishio et al. with remote service device as disclosed by Yoshida et al. for the purpose of diagnosing problems with the appliance.

Response to Arguments

Applicant's arguments filed on February 10, 2009 have been fully considered but they are not persuasive.

With respect to the drawing objection, Applicants argue that the memory (9) is illustrated as being connected to the sensor.

Examiner's position is that the figure shows that the memory (9) is connected to the electronics (7) but not to the sensor (8).

With respect to the 35 USC 102/103 rejections, Applicants argue that Ishio is directed to a self-diagnosing apparatus for a refrigerator. The present invention, as claimed, does not provide a self-diagnosing apparatus for a refrigerator, but rather provides a data recordation system which can provide data to a remote device for evaluation by service personnel to determine the failure cause within the appliance, either on-site or from a central service center.

Examiner notes that claims 10-19 do not recite providing data to a remote device for evaluation by service personnel to determine the failure cause within the appliance. Nevertheless, Ishio discloses, regarding claim 10, a household appliance (refrigerator, Abstract, line 1) having at least one sensor (detector, Abstract, line 4) for detecting at least one operating parameter of the household appliance (Abstract, lines 4-6), a memory (Abstract, line 7) connected permanently to the sensor for periodically recording the value of the operating parameter detected by the sensor (memory stores conditions detected by detector, Abstract, lines 4-8) and an interface (interface

between memory and diagnostic device, Abstract, line 8) for reading out the content of the memory (Abstract, lines 8-10).

Furthermore, Ishio discloses, regarding claim 16, a method for determining a cause of failure on a household appliance (Abstract; column 2, lines 1-12), the method comprising the following acts:

periodically detecting at least one operating parameter of the household appliance and recording the detected value in a memory at least during normal operation of the household appliance (Abstract, lines 4-8);

reading out the memory in the case of a fault (Abstract, lines 8-10);

tracing the cause of the fault from the parameter values which have been read out (performing diagnosis, column 2, lines 1-12; it is inherent that a cause of fault is found since an improvement action is selected by the diagnostic means, column 2, lines 6-7).

Examiner's positions regarding new claims 20 and 21 have been discussed above. Yoshida et al. discloses providing data to a remote device for evaluation by service personnel to determine the failure cause within the appliance (Abstract, lines 5-7; column 2, lines 46-49).

Applicants further argue Severn '673 teaches a telephone interface or cordless interface. Nevertheless, a combination of Severn '673 and Ishio '774 would not result in

the present invention. Further, there is no teaching or motivation to combine Ishio '774 with Severn '673.

Examiner's position is that a combination of Severn '673 and Ishio '774 would result in the present invention as discussed above regarding claims 11-13. Severn discloses the first interface includes an interface to a data network, especially to a telephone network (page 4, lines 102-105), the first interface includes a cordless interface (mobile version of serial communication interface, page 4, lines 119-121). This would increase the range of communication for alarm reporting (page 4, lines 105-107).

Applicants further argue Finnegan '785 fails to cure the deficiencies of Ishio '774 and, a combination of Finnegan '785 and Ishio '774 would not result in the present invention. In addition, there is no teaching or motivation to combine Finnegan '785 and Ishio '774.

Examiner's position is that a combination of Finnegan '785 and Ishio '774 would result in the present invention as discussed above regarding claim 19. Finnegan et al. discloses transferring the recorded parameter values from the household appliance to a separate device (remote control and monitor unit 12, Fig. 1d) and performing the act of tracing the cause of the fault at the separate device (column 7, lines 52-56). Having a remote, separate, and central processing system would increase the capability to process data since data can be collected from a wider range of areas.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael P. Nghiem/

Primary Examiner, GAU 2863

May 1, 2009